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Equalizing Assessments of City Properties: What, Why and How

Cecil Morgan
Municipal Technical Advisory Service

Assessment

technical bulletin

EQUALIZING ASSESSMENTS OF CITY PROPERTIES

What, Why and How

Cecil Morgan

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IN COOPERATION WITH THE TENNESSEE MUNICIPAL LEAGUE

FOREWORD

The property tax is a major source of city revenue. Therefore, the property tax is important to cities at every stage: the making of assessments, the levying of the tax on the assessment, and the collection of the taxes.

At the present time, even though the tax is of vital concern to cities, only a few cities in Tennessee have the power to make assessments of properties for tax purposes. Most cities use the tax assessment of the county in which the city is located. A charter change must be made for a city if it wishes to have full control of its property tax program. With such control, the city's first interest is in equalizing the assessments on city properties.

This publication, Equalizing Assessments of City Properties - What, Why and How, can serve as a guide to city officials in carrying out an assessments equalization program. In addition to discussing the records required, the procedures to follow and some of the problems involved in such a program, this bulletin reviews the tax equalization experience of six Tennessee taxing jurisdictions. The final section draws attention to the importance of having a good public relations program accompanying a tax equalization program.

This Technical Bulletin, the eleventh in the MTAS Technical Bulletin Series, has been prepared by Mr. Cecil Morgan who was appointed as the MTAS Consultant on Property Tax Assessments in the latter part of 1951. Mr. Morgan is available, on request, to give technical assistance to city officials with tax assessing problems and programs.

M. U. Snoderly, Executive Director (Acting)
Municipal Technical Advisory Service

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INTRODUCTION

Tennessee municipalities, like other cities, counties, and states throughout the nation, are becoming interested in equalizing the tax burden. Several developments have called public attention to the tax assessment situation and its inequities. Of these developments we shall mention two:

1. The sharp upward trend in property values has created a gap between assessed valuations and market values which makes the assessment figures almost meaningless.

2. The discrepancy between assessed valuations on new structures (based on current costs or sale prices) and those on older structures.

Within the past four years at least six taxing districts in Tennessee have undertaken assessment equalization programs. Three of these districts were counties, the other three were cities. Among them, they have appropriated $400,000 for these programs. Even in 1952, $400,000 is not peanuts. The object for which it was spent warrants study by other officials.

As the costs of municipal government continue to rise, with a corresponding increase in the amounts to be raised by local taxation, we may expect more attention to be focused upon tax equalization. The property tax system might be compared to a pair of shoes. As long as the demands on it are light - as long as the shoes are to be worn for dress only - the fit is not too important. When the demands become greater - as when the postman makes his rounds - minor pinches invoke major howls. Equalizing the burden eliminates the pressure points.

The purpose of this bulletin is to outline in a general way accepted principles and procedures of a sound tax equalization program. Some information on costs and time requirements is included. The present bulletin deals with real property only. If sufficient interest develops to warrant the publication, a bulletin on personal property tax administration will be issued later.

I. Recent Tax Equalization Programs in Tennessee

The easiest way to convey some idea of costs and time requirements is to cite the recent experience of some Tennessee counties and cities. No attempt is made to evaluate or pass judgment on any of them.

The three county equalization programs in Tennessee are in Hamilton County, Madison County, and Sullivan County. In all three the work is being done by commercial firms on a contract basis. The program is not entirely complete in any of the counties as this is written.

Work in Hamilton County is expected to be completed by the end of 1952. The program has required about three years. Cost per parcel of property is estimated at $4.15.

Work on the Madison County project started in 1949 and continued for about eighteen months. The exact amount of work yet to be done is not clear but it would seem to be a small fraction of the total job. The cost has been about $3.50 per parcel.

The Sullivan County program required about two years and was done at a cost of $2.22 per parcel. That project is virtually complete.

Countywide reappraisal programs offer a number of difficulties that are not found in urban appraisal. Urban property, except for large commercial and industrial plants, can ordinarily be appraised more speedily and at less cost than rural lands.

The three Tennessee cities which have instituted tax equalization programs recently are Brownsville, Gatlinburg, and Cookeville. Brownsville has a population of 4,711, Gatlinburg a population of 1,301, and Cookeville has 6,924 people.

Brownsville contracted its reappraisal job to a commercial firm. The entire cost was $4500 or $3.75 per parcel. Approximately 1200 parcels of property were appraised. The job was done in five months.

Gatlinburg's is the most recent revaluation job. It, too, was a contract job, done at a cost of $4.02 per parcel. The work was completed in something like sixty days of actual working time. About 870 parcels were appraised.

Unit costs in both the above cities were comparatively high, due to the small number of parcels. Some of the costs of a reappraisal program, such as printing costs, are relatively

fixed. Unit costs, therefore, decline as the number of parcels increases.

The Cookeville reassessment program was described in the April 1950 issue of Tennessee Town and City in an article by Louis Johnson. Total cost of this project was about $4000. The cost per parcel was approximately one-half that of the other two cities mentioned above. This job is a particularly interesting one for several reasons. It was conceived and carried out entirely by local authorities. Another feature is that the City Commission recognized the need for a strong citizen information program and carried such a program through. The result has been excellent public acceptance of the revaluation program.

II. What This Is All About

Prior to the depression of the 1930's the general property tax was practically the sole support of local governments. During the depression it became apparent that too great dependence on any one form of taxation was a serious mistake. Consequently, a number of other taxes have been adopted in the past twenty years, the total effect of which has been to lessen the dependence of city and county governments on property taxation. The property tax is still a very important source of revenue for local governments, however; in many cases it produces more revenue than any other one source. It is not likely to become less important in the near future.

One reason why the property tax is likely to remain is that it has a high degree of public acceptance. While it has received much criticism from time to time, most of the criticism has been directed at faulty administration of the tax. The validity of the premise upon which ad valorem taxation is based - that the value of property owned is a fair index of ability to pay - has not been seriously challenged.

For these reasons, as well as for others which need not be mentioned here, it is desirable to secure the best possible administration of the property tax. Equalization is an important step in the direction of good administration.

The first requisite for good property tax administration is the establishment of a broad and fair tax base, which means getting all the taxable property on the tax roll and making sure that each property carries its fair share of the total assessed valuation. Assessment has been defined as "the official act of discovering, listing, and appraising property, whether performed by an assessor, a board of review, or a court." From this definition we see that the assessor is not

the final authority, that his work is subject to review by boards of equalization and by the courts. It is possible for the best original assessment to be wrecked by a poor board of equalization. But, even the best board of equalization cannot make a good job out of a poor original assessment.

Discovering and listing property requires proper records, such as tax maps, record cards, assessment rolls, etc. It requires systematic procedures to keep the records up-to-date and complete. Once the record system is set up and a satisfactory operating routine is established, the maintenance becomes largely mechanical.

Appraisal is a technical aspect of the assessment process and is the critical part of the operation. No matter how complete and up-to-date the record system is, faulty appraisal will nullify its validity.

Appraisals are made for a number of different purposes. There are loan appraisals, insurance appraisals, condemnation appraisals, sale appraisals and others, as well as tax appraisals. Fundamentally, all appraisals are alike in that the end product is an estimate of the value of the property. And since all appraisals are estimates, a "zone of error" exists in every appraisal.

Value is a notoriously unstable something. In one textbook alone the term is defined in 37 different ways. Regardless of which "value" we consider, it fluctuates widely from period to period. Real estate values fluctuate with the purchasing power of the dollar, with developments in the locality, and even with the morale of a community, to mention only a few unsettling factors.

The value with which we are primarily concerned in making tax appraisals is what is known as "Market Value." This has been defined as "the amount of money or money's worth for which goods or services may be exchanged within a reasonable period of time under conditions in which both parties to the exchange are able, willing, and reasonably well informed." That definition, by implication at least, requires the value of all the taxable property to be established as of the same date or period of time.

The easiest and most logical base period to use for establishing values is the period immediately preceding the date of the appraisal. Not enough sales occur in a small taxing jurisdiction in a single day or week to constitute an adequate sampling, so it is often necessary to include sales completed some months earlier. However, the base period should be as short

and as recent as circumstances permit. Many assessors will take issue with this procedure on the grounds that today's values are not normal. The only answer to that argument is that an appraiser has enough to do in making a good estimate of existing values, absolute and relative. If he takes on the added task of trying to peek around economic corners and forecast the future, he is getting out on pretty thin ice.

Three methods are used for the establishment of market value or constructive market value. They are: sales analysis, reproduction cost, and capitalized income. Each method has its uses and its limitations. Taken together they provide us with the means of making appraisals by comparison on a mass basis. The results obtained in mass appraisal have a somewhat wider zone of error than those obtained by private appraisers working with individual properties. The mass appraisal approach is much less expensive, however, and is sufficiently accurate for tax purposes.

Any appraisal system, however good, becomes obsolete after a time. New inventions, new construction processes and equipment, and new styles all contribute to the obsolescence of any system. Through the use of conversion factors the useful life of the system can be lengthened but not extended indefinitely. Improvements erected subsequent to the date of the complete appraisal are valued on the same basis, as long as the original manual is in use. After a period of years, when it becomes apparent that the manual no longer produces the right answers, the entire system can be revised and brought up to date.

In case the assessor wishes for some reason to use a fraction of the appraised value for assessment purposes, he can straightforwardly take the chosen percentage of all appraised values as assessed valuations. This is contrary to law, to be sure, but it is a much more logical procedure - and every bit as legal - as that now practiced by those assessors who claim to be assessing property at its prewar value.

III. Records Are Basic

The discovery and listing of property for assessment requires an adequate system of records. The one form which is mandatory under Tennessee statutes is the assessment roll. Good assessment practice requires a number of additional records and aids. Most important of these are:

1. Tax maps
2. A property identification system
3. Property record cards

4. Alphabetical cross index cards
5. A property appraisal manual

1. Tax Maps. Tax maps are scale drawings showing parcel boundaries or lot lines as indicated on the recorded plats. A scale of 1 inch to 50 feet is desirable for town property although a scale of 1 inch to 100 feet is sometimes used satisfactorily. A recent Sanborn insurance map, if available, is a good base from which to make a set of tax maps. If no recent Sanborn map is available, a Tennessee Valley Authority aerial map may be used as the starting point. Aerial maps of many cities and towns are also available at reasonable cost from the Production and Marketing Administration (P.M.A.), United States Department of Agriculture. The aerial maps are useful mainly for comparison and orientation in urban work. The recorded plats found in the county register's office should be consulted also.

The completed set of maps is perhaps most usable if incorporated into block book form. A common type of block book has a scale drawing of the particular block, together with the surrounding streets and the beginnings of adjacent blocks (identified) on one page. A property ownership record, by lot numbers or parcels, may be carried on the outside margin of the map or on the opposite page. Space is usually provided for recording ownership changes. It is advisable to use numbers rather than names on the maps themselves. Arrangement of the maps may be by blocks and wards, blocks and subdivisions, or any other logical arrangement.

The purpose of the tax map is to help the assessor to locate property quickly and accurately. As long as it serves that purpose well, the exact form is not material.

2. Property Identification System. The property identification system is the device the assessor employs for distinguishing one parcel of property from all others. As long as it serves that purpose efficiently the form is not too important. In most cities it is just as easy to use legal descriptions as any others, since they usually consist only of lot number, block number, and subdivision name. If it is desired, the consecutive numbering system, by parcels, may be used. This has some advantages for small offices, in that the shorter designation is less subject to error in transcription, but that advantage ceases to be important where the addressograph or other mechanical system is used.

3. Property Record Cards. Property record cards are essential to good assessment administration. They should be selected or developed for use with the particular appraisal manual to be used. The property record card has all the essential facts

regarding both land and improvements in convenient, standard form. Among other information shown should be the following:

(1) legal description, address and ownership of property;
(2) size, use and value of land, with any value adjustment factors noted;
(3) date of appraisal and name of person collecting the field data;
(4) name of person who performed office computations;
(5) number, kind and grade of improvements;
(6) scale drawings of the ground plans of all major structures;
(7) ground areas or volumes of structures;
(8) unit costs and extensions;
(9) an itemized list of all additions to and deductions from standard structures of this class and grade;
(10) age of improvements;
(11) an itemized list of all price adjustment factors affecting improvements and the weight (percentage) given each.

All items of information needed for office computation must appear on the card; other items may be included if desired. Many assessors prefer a property record card so arranged that a small photograph of the major building may be mounted on the face of the card. This feature is not mandatory but seems justified by its utility and its small additional cost (usually less than 5¢ per photo).

Property record cards should be filed geographically. Every parcel of property requires a card, although tax exempt property need not be appraised. The property record file, together with the tax map system, is positive assurance that no property has been omitted from the tax roll, as well as assurance against double assessment, if properly used.

4. Alphabetical Index Cards. These cards are usually small (5" x 8") cards containing only the information needed for the assessment roll, plus the property record card index number or legal description. There should be one card in the alphabetical file for each parcel of property. Making up the assessment roll is a very simple operation if the card file is kept current; all that is necessary is to run through the alphabetical file.

Some assessors mount the cards in a Kardex file for better visibility; others use ordinary file drawers with alphabetical file tabs.

5. Property Appraisal Manual. A good property appraisal manual

TRANSFER RECORD

County

Reception No. _____ Deed Book _____ Page _____ Town or City

Instrument _____ Date of Transfer _____ Reappraisal Class

Grantor: _____

Address _____

Grantee: _____

Address _____

Legal Description _____

_____

_____

_____

_____

_____ Acres _____

Street Number _____ Assessor's Tract Number _____

Subject to following indebtedness: _____

_____

_____

_____

_____

Mortgage or Trust Deed $_____

Liens $_____

Taxes $_____

Revenue Stamps $ _____ Equiv. Value $_____

Full Consideration $_____

Doc. Consideration $_____

	ASSESSED VALUE	YEAR	APPRAISED VALUE
Land	$_____		Land $_____
Improvements	$_____		Improvements $_____
Total	$_____		Total $_____

RATIOS

Assessed Value to Sale ___% Appraised Value to Sale ___% Assessed to Appraised Value ___%

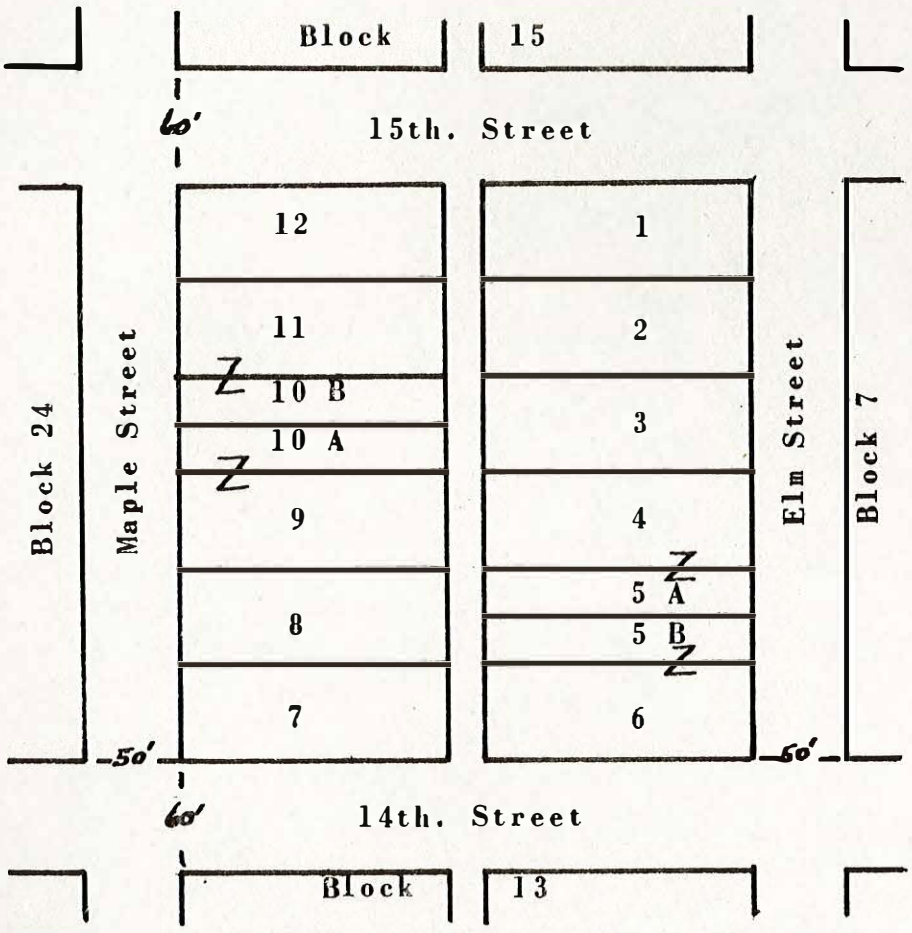
Abstracted by: _____ Date _____

Remarks:

Sample Transfer Record Form Used in Making Survey

BLOCK 14

CHERRY HILLS SUBDIVISION



EXAMPLE OF A BLOCK MAP

Actual Sheet Size 14" x 16"

BLOCK NO. _____

_____ SUB-DIVISION

	YEAR	LOT DESCRIPTION	INDEX NO.	OWNER	VALUE LOT	VALUE IMPROVEMENTS	TOTAL FULL VALUE	TOTAL ASSESSED VALUE
	1952							
	1953							
	1954							
	1955							
	1956							
	1952							
	1953							
	1954							
	1955							
	1956							
	1952							
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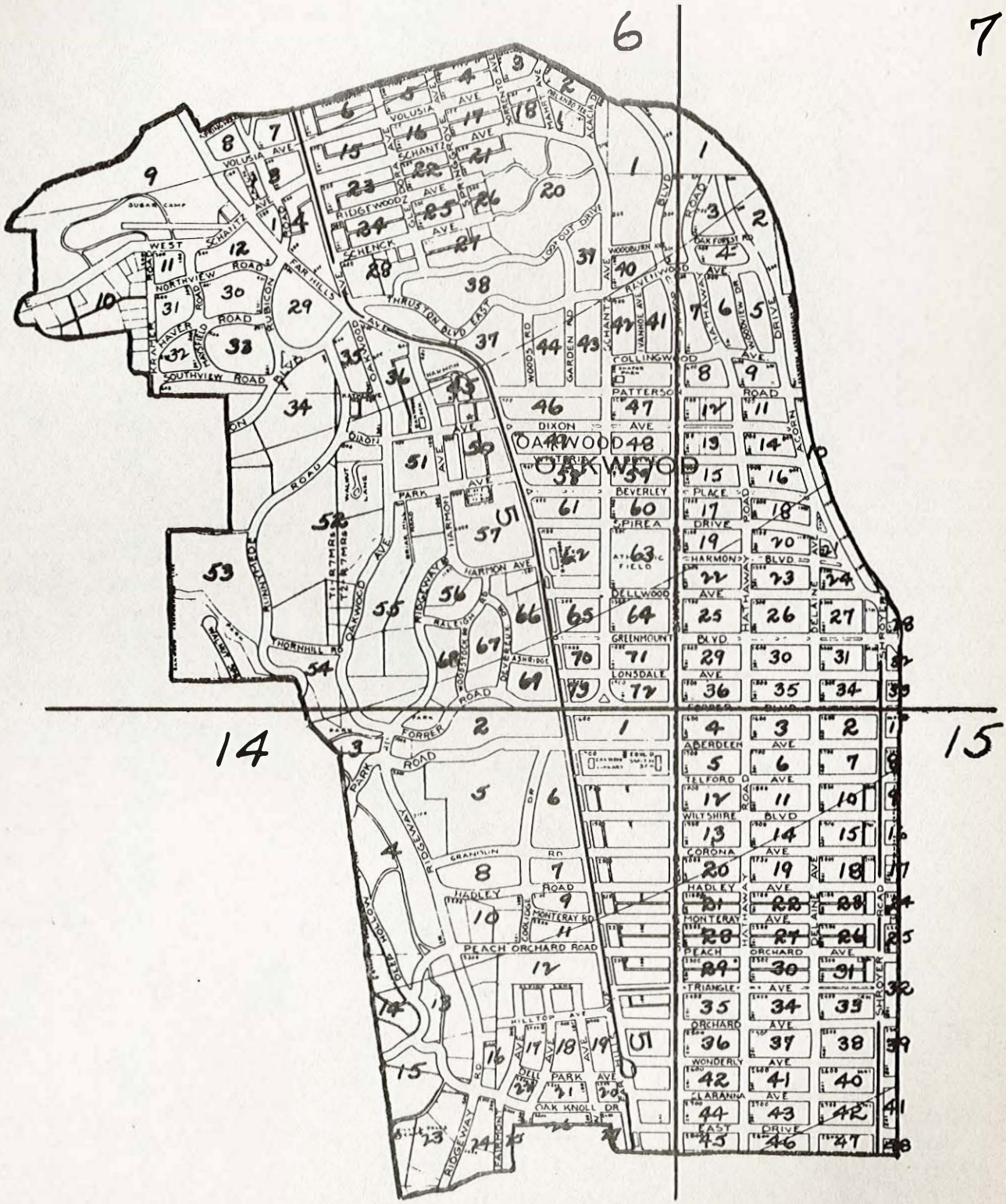
	1955							
	1956							
	1952							
	1953							
	1954							
	1955							
	1956							

EXAMPLE OF A BLOCK OWNERSHIP RECORD SHEET

Actual Sheet Size 14" x 16"

Example of City Index Map



BUILDING DESCRIPTION AND VALUE CALCULATION

CARD ___ OF ___ CARDS

CLASSIFICATION NO. 1.3B1 MAIN BUILDING DESCRIPTION

BLDG. NO. ___

TYPE AND USE
- [x] 1-FAMILY DWELLING
- [ ] 2-FAMILY DWELLING
- [ ] ROW HOUSE
- [ ] APARTMENT BUILDING
- [ ]

UNITS AND ROOMS

KIND OF UNITS	NUMBER OF UNITS	NUMBER OF ROOMS
Dwg.	1	5

FOUNDATION
- [ ] POSTS OR PIERS
- [x] WALLS
- [ ]

EXTERIOR WALLS
- [ ] WOOD FRAME
- [ ] SHEATHING [ ] NO SHEATHING
- [ ] SOLID MASONRY
- INSULATION: 100 % AREA
- [ ] SIDING: WOODBOARD
- [ ] BOARD AND BATTEN
- [ ] SHINGLE: WOOD
- [ ] ASPHALT [ ] ASBESTOS
- [x] STUCCO
- [ ] BRICK VENEER: COM. [ ] FACE
- [ ] STONE VENEER: NATIVE [ ] CUT
- [ ] BRICK SOLID: COM. [ ] FACE
- [x] CONCRETE BLOCK
- [ ]

ROOF
- TYPE: [ ] FLAT [x] PITCHED [x] LOW [ ] MEDIUM [x] STEEP
- [x] FRAMING: SIMPLE [ ] AVERAGE [ ] DIFFICULT

ROOFING
- [ ] PREPARED ROLL
- [ ] BUILT-UP ASPHALT
- [x] SHINGLE: WOOD [ ] ASPHALT
- [ ] ASBESTOS [ ] SLAT
- [ ] TILE: METAL [ ] CEMENT [ ] CLAY
- [ ] TIN [ ] COPPER
- [x] INSULATED
- [ ]

BASEMENT
- AREA: [ ] 100% [ ] 75% [ ] 50% [ ] 25% [ ] NONE
- [ ] NO FLOOR
- [ ] PLASTERED CEILING [ ] PLASTERED WALLS
- [ ] WALLS: KIND
- FINISHED ROOMS: NO. ___ ___ % AREA

FLOORS
- [ ] SUBFLOOR 1ST [ ] 2D UP
- [ ] NO SUBFLOOR 1ST [ ] 2D UP
- CONSTRUCTION:
- [ ] WOOD JOISTS
- [x] CONCRETE ON GRADE
- [ ]
- FINISH FLOORING:
- [ ] HARDWOOD [ ] SOFTWOOD
- TILE: SQ. FT. Asph-900
- 300 HARDWood PARQUET SQ. FT.

INTERIOR FINISH
- [ ] WALLBOARD OR EQUAL
- [x] PLASTERED
- [ ] WOOD PANELING: KIND:
- SQ. FT. ___
- TILE WALLS: SQ. FT. Bath
- TRIM: HARDWD. ___ RMS.
- SOFTWOOD 5 RMS.

LIGHTING
- [x] ELEC. [ ] GAS [ ] NONE

ATTIC
- [ ] FINISHED STAIRS
- PERCENT OF GROUND AREA:
- FINISHED ___ % UNFIN. ___ %

PORCHES
- NUMBER: OPEN ___ CLOSED ___
- UNFINISHED ___ FINISHED ___

TERRACES
- KIND ___

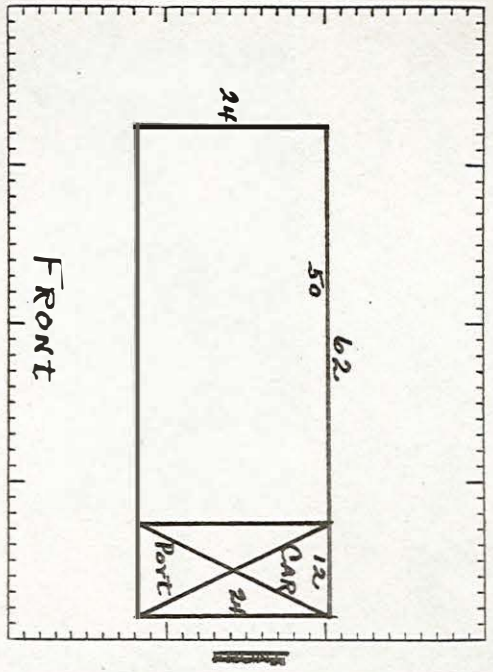
HEATING
- [ ] STOVE
- [ ] WARM AIR: PIPELESS
- [ ] PIPED
- [ ] FORCED CIRCULATION
- [ ] HOT WATER OR VAPOR
- [x] STEAM Elec-Ceil. PANELS
- [ ] GAS STEAM RADIATORS
- [ ] GAS FLOOR FURNACES NO.
- [ ] AIR CONDITIONING
- AUTOMATIC BURNER OR STOKER
- [ ] OIL [ ] GAS [ ] COAL

PLUMBING
- [ ] NONE [ ] WATER ONLY
- BATHROOMS 1 TILED No
- NUMBER OF FIXTURES:
- WASHSTANDS 1 Dbl. TUBS 1
- WATERCLOSETS 1 SHWRS. ___
- SHOWER STALLS ___
- [x] AUTOMATIC WATER HEATER
- [x] KITCHEN SINK [x] LAUNDRY TUBS See Note

OTHER ITEMS
- NATURAL FIREPLACES No
- GAS FIREPLACES ___
- OUTSIDE CHIMNEYS ___

STATE OF REPAIRS
- [x] EXCELLENT [ ] GOOD [ ] FAIR [ ] POOR

GROUND PLAN SKETCH (INDICATE NUMBER STORIES)



DEPRECIATION AND OBSOLESCENCE

A.	AGE (NORMAL DEPRECIATION)	0 %
B.	PHYSICAL CONDITION	0 %
C.	MODERNIZATION (MINUS)	0 %
D.	TOTAL DEPRECIATION	0 %
E.	NET CONDITION (100-D)	100 %

SPECIAL OBSOLESCENCE

F.	LOCATION (AREA NO. ___)	0 %
G.	OTHER	0 %
H.	TOTAL SPECIAL OBSOLESCENCE	0 %
J.	FINAL NET CONDITION (100-H) XE	100 %

AREA--MAIN BUILDING

	AREA
24 x 50	1200
x	
x	
x	
x	
24 x 12 Carport	288
x	
x	
House-TOTAL	1200

REPRODUCTION COST AND FINAL VALUE

MAIN BUILDING

ITEM NO.	AREA OR QUANTITY	UNIT COST	TOTAL
BASE			
1.3B1	1200	8.00	9600
Carport	288	1.50	432
ADDITIONS (PLUS)			
Floored	1200	—	615
Dbl Last	—	—	25
Auto Dry	—	—	250
Water Htr	—	—	125
Insul Roof	1200	.14	168
Tile Work	—	—	190
DEDUCTIONS (MINUS)			
Roof	1200	.17	204
No Bdrms	1200	1.35	1620
No Fireplace	—	—	270
Ldry Tubs	—	—	55
Bath floor			55

BASE REPRODUCTION COST	$	9201
FINAL NET CONDITION		100 %
FINAL VALUE-- MAIN BUILDING	$	9201

SUMMARY OF BUILDING VALUE

MAIN BUILDING	$	9201
GARAGE CAR PORT Incl. Above		
MINOR BUILDINGS		
OTHER IMPROVEMENTS		
TOTAL BUILDINGS AND IMPROVEMENTS	$	9201

DATE OF CONSTRUCTION

DATE	AGE	SOURCE
1952	0	Contractor

MAJOR ALTERATIONS OR ADDITIONS

DATE	AGE	DESCRIPTION	PER CENT

MAJOR ALTERATIONS OR ADDITIONS

DATE	AGE	DESCRIPTION	PER CENT

GARAGE AND MINOR BUILDINGS

CLASS NO.	SIZE WIDTH x DEPTH	AREA	WALLS	FLOOR	ROOF	2D FLOOR FIN.	2D FLOOR UNF.	HEATING	LIGHTING	PLUMBING	REPRODUCTION COST	AGE	DEPRECIATION	NET VALUE

SPECIAL BUILDING NOTES: Auto. Washer. Car Port has flat T+G. roof
300 Sq. Ft. Hardwood Parquet floor in L.R. + D.R.

REAL ESTATE APPRAISAL CARD--URBAN MASTER

CITY OR TOWN: Knoxville STREET ADDRESS: 702 No. Pine INDEX: 1-14-15

OWNER'S NAME AND ADDRESS:

CHANGES IN OWNERSHIP:

NAME	ADDRESS	DATE	VOLUME	PAGE	TYPE INSTRUMENT	REMARKS

TAXING DISTRICTS: CITY ____ SCHOOL ____ FIRE ____ SANITARY ____ OTHER ____

LEGAL DESCRIPTION	SUB-DIVISION OR ADDITION	SECTION	TWP.	RANGE	BLOCK
Lots 1 & 2	Cherry Hills				14

LOT OR ACREAGE DESCRIPTION

ZONING		STREET OR ROAD		IMPROVEMENTS		TOPOGRAPHY	
RESIDENTIAL	✓	PAVED		SIDEWALK		LEVEL	
APARTMENT		HARD SURFACE		CURB		HIGH	
COMMERCIAL		OILED	✓	DRIVEWAY	✓	STEEP	
LIGHT INDUSTRIAL		GRAVEL OR STONE		CITY WATER	✓	SOIL	
HEAVY INDUSTRIAL		UNIMPROVED		WELL ☐ SPRING		LOW	
		CONDITION:		SEWER	✓	SLOPING	✓
		GOOD		ELECTRICITY	✓	HILLY	
		AVERAGE		GAS		ROCK	
		POOR		PAVED ALLEY			

REGULAR LOT SIZE 100 x 125

IRREGULAR LOT SIZE x x

SPECIAL LAND NOTES:

LAND VALUE CALCULATION

SIZE OR ACRES	UNIT VALUE	DEPTH, CORNER, OTHER TABLE	DEPTH, CORNER, OTHER FACTOR	FRONT FOOT OR ACRE VALUE	TOTAL VALUE
					$
100 FF	FF			12	1200

NET ADDITION ____ % ____ AMOUNT

NET DEDUCTIONS 15 % 180 AMOUNT

TOTAL $ 1200

ADD OR DEDUCT 180

TOTAL LAND VALUE 1020

BASIS OF ADDITIONS OR DEDUCTIONS:

No Curb, Gutter or Sidewalk

SUMMARY

DESCRIPTION	DATE	AMOUNT
BUILDING PERMIT		$
ORIGINAL COST (IMPROVEMENTS)		
ADDITIONS AND BETTERMENTS		
OWNER'S ESTIMATE OF VALUE		
PRIVATE APPRAISAL		
INSURANCE		
MORTGAGE		
MONTHLY RENTAL		
ADVERTISED FOR SALE	1952	15,000
TRANSFERRED		

ANNUAL ASSESSMENT

YEAR	% CHANGE	REASON	LAND	IMPROVEMENTS	TOTAL
19			$	$	$
19					
19					
19					
19					
19					
19					
19					
19					
19					
19					

SUMMARY OF LAND AND BUILDING VALUES

	FULL APPRAISED VALUE
LAND	$ 1020
BUILDINGS AND IMPROVEMENTS (THIS CARD)	
CARD NO. ____	
CARD NO. ____	
TOTAL BUILDINGS AND IMPROVEMENTS	9201
TOTAL ASSESSED LAND, BUILDINGS AND IMPROVEMENTS	$ 10,221

MEASURED BY ____ DATE ____ CLASSIFIED BY ____ DATE ____ CHECKED BY ____ DATE ____

ADDRESS OF PROPERTY

INDEX NUMBER

LEGAL DESCRIPTION

ASSESSMENT RECORD

YEAR	REAL ESTATE			PERSONAL PROPERTY	TOTAL ASSESSMENT
	LAND	IMPROVEMENTS	TOTAL REAL ESTATE		
1952					
1953					
1954					
1955					
1956					
1957					
1958					

NAME

MAIL ADDRESS

EXAMPLE OF AN ALPHABETICAL FILE CARD

Kardex Style

is an indispensable item to the assessor's office. Several good manuals are in existence now, some of which are listed in the bibliography attached to this bulletin. Manuals are useful chiefly for the valuation of improvements, which is the most time-consuming phase of urban appraisal work. The purpose of the manual is to help the appraiser accurately to determine reproduction costs for the various types and grades of structures.

Record systems must be maintained if they are to have value. This means that definite schedules and procedures must be established in the assessor's office. Changes in ownership, boundaries, etc., should be recorded as soon as possible. Definite arrangements must be made to keep the assessor's office informed of these changes, also.

IV. Seven Steps to Take

A brief outline of the various steps involved in an urban revaluation or reappraisal program is presented below. Some of these steps have been discussed in preceding sections; others will be discussed at greater length in succeeding sections. A list of all the essential steps, in chronological order, may be helpful at this point. Experience has indicated that the following is the normal and logical order:

1. The survey
2. Planning the record system
3. Preparation of tax maps
4. Appraisal of lots and lands
5. Preparation for improvement appraisal
6. Appraisal of improvements
7. Adjustment of values

These are not hard and fast divisions of the task; there is a certain amount of overlapping. Indeed, there is a question as to whether some items above should be designated as distinct operations, but the list will serve as a basis for discussion.

1. The Survey

The first step in any prospective revaluation program is the determination of need for such a program. Unless it can be shown that a definite need for tax equalization exists, the governing body is not justified in spending public funds on the project. On the other hand, many officials believe their city property to be equitably assessed without having a factual basis for the belief. A survey frequently discloses

inequities that nobody suspected. A survey is the simple, inexpensive way to find out what the assessment situation is.

In its simplest form the survey consists of a study of the relationship between actual sale prices and assessed valuations on recently-sold properties in the community. All warranty deed transfers for the locality during the given period of time should be checked. Transfers between relatives, transfers in which the unpaid balance of the mortgage is not specified, and other transfers of a questionable nature should be deleted. It is important that the transfers used be as recent as possible but at the same time there must be a sufficient sampling from which to draw valid conclusions. In order to get a larger sampling it may be desirable to use some "bid prices" and "asking prices." The need for caution in using these figures, however, is obvious.

The U. S. Revenue stamps on the deed may be accepted as evidence of the amount of the same (i.e. 55¢ in revenue stamps for each $500 of consideration). It is good statistical practice to consider each sale as falling into the middle of the bracket indicated by the revenue stamps. Thus, stamps in the amount of $1.65 would indicate some consideration between $1000 and $1500 and should be entered as $1250.

After a sufficient number of usable transfers have been taken off the county register's books the assessed valuations can be obtained from the assessor's records. By comparison of these figures it is possible to ascertain the average ratio of assessed valuation to sale price, the range of ratios, the price brackets in which the higher and lower ratios occur, etc.

A sample form for use in taking off transfers is shown. Complete information on each transfer should be secured and retained. In case a reappraisal is instituted, that information is used in several different ways.

Analysis of the information obtained in the survey will definitely indicate the remedial measures to be taken, if any are needed. If the ratio of assessed valuation to sale price is fairly constant, the entire level can be adjusted at will, without disturbing the relative values, by percentage increases or decreases applied to all properties. If the ratio fluctuates greatly, remedial action is indicated. In any event periodic surveys should be made. The fact that a survey can be made in even the largest city at very small cost commends its frequent use. This type of study is so valuable (and so inexpensive) that many large taxing jurisdictions make annual surveys.

2. Planning the Record System

If a decision to make a wholesale revaluation of property has been reached, the next step is to select the records, forms, physical equipment, and personnel to be used. The record system was discussed in section III and little more need be said here. There is considerable latitude on these items, however, depending upon the degree of exactness sought, the amount of help available, and other considerations. Those details should be decided at this point and the equipment installed.

3. Preparation of Tax Maps

This item was covered in section II. Preparation of the tax maps is normally the third step in the program, if we consider planning the record system as a distinct step. It is desirable to have either the city engineer or some person with engineering training in charge of this phase of the job. If such a person is not available, anyone with ordinary ability can do it, provided he is willing to take some pains with the job.

It is desirable for the field men to have copies of the block maps with them when they do the field work. These can be made at this time. A good way of handling this is to have the field block maps on blank sheets of the same size and weight as the property record cards. They may very well be done in pencil, but should be drawn to scale. After field work is completed these maps can either be placed in the property record card file or discarded.

4. Appraisal of Urban Lots and Lands

This topic will be discussed in section V. It is the logical first step in the appraisal process proper.

5. Preparation for Appraisal of Improvements

This phase, like that designated as "planning the office record system," might not be considered by some as a distinct step at all. There is, however, some work on the property record cards which should be done in the office before the cards go to the field men. This includes entering the owner's name, the legal description and address on the property record cards. Size of the lot should be indicated also. A card should be made for every parcel of land, even though it is exempt from taxation. A careful check should be made to see that every square foot of land is accounted for and that there are no duplications or overlaps.

The geographical file and alphabetical cross file should be

set up at this point. At this point, also, the training of field crews should be done.

6. Appraisal of Improvements

This topic will be discussed in section VI. It is the most time-consuming phase of the entire appraisal process. Since urban improvements normally account for considerably more valuation than do the lands on which they stand, this is a critical step in the program.

7. Adjustment of Values

This step will be discussed in section VII. It is the final step in the appraisal process and the one requiring the greatest display of seasoned judgment. In this phase, as in the valuation of urban lands, the information secured in the survey is very useful.

V. City Land: What's It Worth?

This topic is one which is covered in every standard appraisal manual; the purpose in this section, therefore, is only to outline the procedure in a general way.

Of the three approaches to value establishment mentioned in section II, the sales analysis method is the one primarily used for urban land valuation. For obvious reasons the reproduction cost approach cannot be used for lands. The capitalized income approach is not adapted to vacant lot valuation because in ordinary instances, vacant lots produce no income. By a process of elimination, then, the sales analysis or comparative sales method is indicated.

It is a generally accepted principle that the determining factor in urban lot valuation is the location - size of lots, utilities available, etc., being equal. The amount and kind of improvements affect lot value only indirectly - only insofar as the improvements in a neighborhood tend to make land ownership there more or less desirable. This is another way of saying that there is no difference in lot value between a vacant lot and the improved lots on each side of it, other factors being the same.

For this reason, the best possible index to lot valuation is the bona fide sale price of unimproved lots. If a reasonable number of such transfers have occurred and if they are reasonably well distributed through the city, urban lot valuation becomes a very simple process. Unfortunately, this

ideal condition seldom exists. So we use the sales information we have (that obtained in the survey) and supplement that information with informed local opinion. The usual procedure is this:

1. On a work sheet copy of the city map, outline the vacant lot sales obtained in the survey with a red pencil mark around the area transferred, indicating the transfer price on the enclosed area.

2. Reduce the figures above to standard front foot values if the values are large enough to justify a high degree of exactness. To avoid complications, use interior lots of standard depth. In smaller towns and sometimes on residential property in larger cities a price per lot may be sufficiently accurate.

3. Outline on the map the boundaries of zones or predominant use areas. Residential, commercial, and industrial zones should be valued separately.

4. Within the zones above translate the unit dollar values to percentage figures, using a second work sheet map for this purpose (the highest unit value is shown as 100%, etc.). Fill in the gaps and make tentative extensions to cover the entire area or zone. Breaks in value should be made on the alleys where possible. This permits lots on opposite sides of the street to carry the same unit value.

5. Check the percentage value map above with local people who have first-hand knowledge of land values. Realtors, loan agency representatives or bankers may be selected for this local committee. Much more can be accomplished with a small committee than with too large a committee. The assessor should have at hand his work map showing actual transfer figures but should not ordinarily display it to the committee. The function of the committee is not to set values on particular lots - that is the function of the assessor - but rather to give the assessor the benefit of their experience and judgment regarding relative values. After the relative values have been set up satisfactorily for all classes of lots, the work of the committee is finished. The assessor then proceeds to translate the percentage figures into dollar values and extends them to the individual parcels, using the front foot values or other appropriate units. These values are still tentative in that they are subject to adjustments for terrain features, utilities available, etc., which may make one building site more or less valuable then the adjacent ones. In making these adjustments, care should be exercised to make no adjustments unless an actual sale price differential exists. The assessor must not

let his personal prejudices or any other extraneous factors influence him. To illustrate: It is correct to make an adjustment in lot value for the lack of curb and gutter if the market price bears out the practice. If lots without curb and gutter command the same price as those with curb and gutter in place, no price adjustment should be made, even though the expense of these improvements is considerable.

Physical inspection of all lots by the assessor is necessary, if the valuation is to be realistic.

Undeveloped tracts of land inside the corporate limits present a special problem. The most defensible solution is to value such tracts in this manner: Take a strip of land 125 feet deep (or whatever the standard lot depth in the town may be) around the outside of the tract and value it the same as the lots across the streets. Value the interior portion of the tract as acreage. Until access streets are opened, the land does not have normal lot value.

Many special formulas for the valuation of city lots of irregular shapes have been developed. These may be found in any textbook or manual on appraisal. Depth tables, corner influence tables, etc., may be found there, also. These formulas and tables have their uses but the assessor must use judgment in applying them. It is not good business to use formulas blindly. The simplest techniques that will produce the needed degree of accuracy are usually the best.

As a check against the sales analysis approach and to check the judgment of the local committee, it is sometimes advisable to use the capitalized income method of valuation. In doing this, compare rentals on similar types and grades of homes, stores, etc. Reducing all figures to rentals per room (in the case of residential property) or per front foot (using a depth table) in the case of business property will compensate for the variation in size of improvements. The capitalized income method of valuing land is tricky at best because of the impossibility of separating location value from the value of the buildings rented. The method is useful mainly for verifying comparative values, not for establishment of absolute values.

VI. How to Value Improvements

As stated in a preceding section, the valuation of urban improvements is the most time-consuming phase of the appraisal process. It is also the most important step, since the bulk of urban real estate value lies in the improvements. In general,

the value of improvements will approximate 90% of the total value of urban land and improvements. Because of this high ratio of improvement value to land value, it was recognized long ago that if a scientific method of appraising urban improvements could be developed, the result would be a close approach to the total value. This phase of appraisal work has, therefore, received more attention than any other. The methods used in improvement appraisal have gained greater acceptance then those elsewhere employed because the public is more familiar with them.

The primary approach to improvement value is through the reproduction cost method. The reproduction cost method assumes that the upper limit of value of a building or structure is the amount of money necessary to reproduce it at a given date or time. This assumption is not always valid. During a period of extreme demand for housing, the purchaser may be willing to pay a premium for an existing structure rather than wait for months for an equivalent new structure to be built. The assumption is generally accepted as valid, however.

By adjustments to this upper limit of value (the reproduction cost) for age, physical condition, location, etc., it is possible to arrive at quite precise present values for structures. The adjustment process will be discussed in the next section. The establishment of base values is the concern of this section..

1. Field work

After the property record cards have been prepared in the office (refer to section IV for order of procedures) they are turned over to field crews for the gathering of field information. Two men usually make up a field crew. Their job is to verify the information regarding lot dimensions, note the topography of lots, improvements to the lots (such as curbs and sidewalks),utilities available, etc. They measure and describe the structures, recording the information in the proper spaces on the record cards. The ordinary division of duties is this: The crew chief explains the mission to the householder, secures the information which the householder can supply, and checks the construction items which can best be checked inside the building. He is also responsible for seeing that all pertinent information is secured and entered on the card.

The second man on the crew meanwhile photographs the major building or buildings, measures the buildings, and makes a field sketch showing the ground plan and dimensions of all structures. The age, state of repairs, and information

regarding major alterations or additions are recorded.

Classification of improvements as to quality (grade) may be done at this time or it may be done later by the person doing the pricing. It is very important that the field work be well and completely done since it is the basis for all subsequent operations.

2. Office check

When cards are returned to the office they should be checked at once by the person who is to do the pricing to see that all the information needed for that operation is on the card. The pricer will note any questionable or omitted items and clear these up, either by questioning the field crew or by requiring them to make a second visit to the property. The field sketch of the ground plan of the major building is transferred to the record card as a scale drawing.

3. Classification

If classification of buildings was not performed by the field crew, it should be done at this point by the pricer or supervisor.

4. Pricing

The base cost figure is determined by the class and size of the structure and is obtained directly from the manual. Specifications of the individual building are checked against the standard structure. All substantial variations from the standard structure will result in additions to or deductions from the standard cost. These variations are noted and adjustments made, using the unit costs given in the manual. All computation work should be done by machine, if possible. The result of these computations is an estimate of the cost of building, at the time of the appraisal, a structure equal in size, grade, and utility to the building in question. Reproduction cost does not necessarily represent the cost of an exact duplicate of the given structure.

5. General

Improvements should be appraised in the order of difficulty. That is, residential property should be appraised first, then commercial property, finally industrial property. Ordinarily, residential property will account for between 80% and 90% of all parcels of property. There is no good reason why that portion of the work cannot be done by the local assessor with local help. Training in the use of the appraisal

manual is essential, of course, but the job of using the manual properly to arrive at reproduction costs of residential property is not difficult or complicated.

The same is true of the simpler types of business buildings. It should be possible, then, for the assessor in a small city to perform the entire revaluation job with local resources.

In the case of larger cities, where many of the commercial and industrial buildings are larger, more complicated, and more valuable, it may be desirable to engage a commercial firm to do this phase of the appraisal job. The cost of training local people to the skill level required for appraising complicated and unusual structures may well be greater than the cost of having a commercial firm appraise them.

VII. Check and Cross Check

The final phase in the establishment of improvement values, as in the establishment of urban land values, is the adjustment phase. In the valuation of improvements, this means making proper allowances for differences in age deterioration, physical condition, modernization, and location. We all recognize, for instance, that an old house is not as valuable as a new house, all other things being equal. The question is: How much less valuable is the old house? The adjustment process is an attempt to answer that question, as well as the other questions implied above.

Essentially, the process of adjusting improvement values is the same as that for adjusting lot values. The figures with which we start were obtained by using the reproduction cost approach. We now compare the results obtained by that method with the results obtainable by using the sales analysis and capitalized income approaches. We then make such adjustments to the reproduction cost values as are justified by the other two approaches.

Consider first the deterioration due to aging of a building. Every structure is subject to age deterioration (sometimes called normal depreciation) regardless of how well it is maintained. A good-grade building deteriorates more slowly than a poor-grade building, but it still deteriorates. Every real estate appraisal manual contains age depreciation tables, graphs, or charts. Depreciation, expressed as a percentage of reproduction cost, can be obtained directly from the chart or table. There is no great variation between the figures obtainable from any one of a half-dozen accepted depreciation tables. A word of caution, however: All standard depreciation tables are based upon pre-war real

estate sales experience and do not fit post-war market conditions. Perhaps the safest course is to consider the percentage of value left after depreciation, as obtained from the table, as constituting the lower limit of value. The reproduction cost itself represents the upper limit of value. The actual value would then lie somewhere between the extremes indicated. Its exact location between the extremes may often be determined by analyzing recent sales data.

Value changes due to physical condition or state of repair of a building are somewhat easier to estimate. A frequent practice is to make an allowance ranging from 1% to 10% of reproduction cost for poorer-than-average maintenance. Most appraisers hold that the 10% maximum is a sufficient allowance to cover this one type of depreciation.

Modernization of a structure has the opposite effect to aging upon its value. It offsets, to some extent, the obsolescence caused by new inventions and style changes since the house was originally built. This topic is covered in practically all appraisal manuals. Caution: Do not overestimate the effect of modernization. Its effect is to increase value but not to restore it completely. Also, be careful to make a distinction between genuine modernization and deferred maintenance. They are often confused.

Differences in value due to location can frequently be completely covered by the difference in value of the lots. When the difference is greater than can be accounted for that way, the so-called "residual method" may be used. This method involves a comparison of the sale price of improvements alone (total sale price less the value of the lot) in the location in question with the sale price of improvements alone of an equivalent property in a standard location. The method is valid, however, only if it is based on a considerable number of sales in each of the general locations being compared.

Comparative rentals, reduced to a per-room or per-front-foot basis, is another means of determining the allowance, if any, that should be made for location.

Many assessors limit the amount of depreciation allowance for all causes to a set maximum percentage. One assessor, for example, does not permit the assessed valuation to fall below 20% of reproduction cost - regardless of age, condition, etc. - so long as the building is in use. The same assessor places a tax valuation to 10% of reproduction cost on buildings that are no longer usable but still standing.

The process of adjusting base costs is a most important step in the appraisal of improvements. At that point the appraiser

weighs and correlates all the information available to him, by whatever approach he may have obtained it. The final estimate, if it is good, is based upon seasoned judgment as well as scientific appraisal methods.

The adjusted value of the improvements added to the adjusted value of the lot is, of course, the final appraised value of the parcel of property.

VIII. Inform the Public

Changing the assessment structure of a community is like removing a piece of gravel from the hoof of a lame mule. You know the job should be done. But does the mule know it?

The following article on the necessity for a good public-information program appeared in the March 1952 issue of Tennessee Town and City. It is reproduced below without change.

"Everybody Can Love the Tax Assessor"

An influential public speaker has offered a formula for the successful address. "Show respect," he says, "for God, Mother, Country, and the Party and give a verbal kick in the pants to Anti-Americanism, the Communists, Government Controls and the Tax Assessor!"

The tax assessor is right in there with the negative elements. That's where the public puts him. Everybody hates the tax assessor!

This isn't a very productive attitude toward the tax assessor - the man. It's a downright dangerous attitude toward the tax assessor's employer, the city, which relies on his work for a major part of its revenue.

Both parties, the assessor and the city, have a stake in the opinion everyday people have of the tax assessor. Both would like to know what can be done to dehorn the tax assessor in the eyes of Mr. and Mrs. Citizen. Here are some suggestions about how to do the job.

It's a job for a salesman. The assessor must have something to sell - a good program. He must have the backing of a reliable company - city officials who'll stand firmly behind him and his product. And he must employ the techniques of salesmanship.

The assessor must offer a good, fair product. Traditionally, the assessor's method of evaluation has been strictly subjective (guesswork, if you want to be brutal). He has said, in effect, "I don't know very much about the valuation of property but neither does anyone else. I am a decent, understanding member of the community and will not skin you intentionally." Is it any wonder that the taxpayer has a few doubts about the quality of the product (his assessment) or the technical skill of the salesman (the assessor)?

It doesn't have to be this way, though. Assessment of property need no longer be strictly guesswork. There are proven mass appraisal techniques which virtually eliminate the subjective element from tax assessment. If the assessor uses these techniques he knows that Property "A" is more valuable than Property "B" and he knows how much more valuable it is. Furthermore, these techniques can be explained in language that the owners of Property "A" and Property "B" can understand and approve.

How does a city get these techniques? How can it improve its tax assessment "product"? One method is to employ an outside appraisal firm to make a uniform wholesale appraisal of all property. The results obtained are not as detailed as lending agencies usually require but they do approach the level of accuracy required by such agencies.

The work of the appraisal firm is to prepare maps, set up an office record system, prepare manuals for the use of field and office workers, train the local assessment workers and supervise the entire operation. The local tax assessor familiarizes himself with the new system during the period that it is being installed and thereafter should be able to maintain it.

It should be mentioned here that the tax assessor is the key man not only after the contracting firm has finished its reassessment - but during the process. Unless the assessor learns the new program during the installation period, he may find himself with a program which he doesn't know how to operate once the outsider has moved out.

Let me say at this point that no matter who does the reassessment job, the finished program, the new product, is the city's. Responsibility for it rests squarely on local shoulders.

A second method of modernizing tax assessment is to secure the services of an experienced person or firm on a consultant basis. This person or firm gives local officials the benefit of his knowledge and experience in connection with making maps,

training workers, assessing properties and keeping records.

The consultant advises on all technical matters pertaining to the program. But it is not his program. It is a program initiated by local people to fit local needs and conditions. His role is solely that of counselor; the actual doing is the responsibility of local officials, from beginning to end. To borrow an analogy from medicine, the consultant is the diagnostic specialist, but the assessor (along with his colleagues in city hall) is the family doctor!

This brings us to the second task of the assessor and the city: applying salesmanship to the job. A good public relations job is an absolute necessity for a successful reassessment program. This fact was very forcefully brought home to the writer on a recent visit to a Tennessee city.

The city in question has completed a reassessment program which is sound and workable from a technical viewpoint but which failed of acceptance because the public hadn't understood how bad the situation was nor what the new program could mean to them and their city. The city officials knew of the inequities that needed to be corrected. They assumed that the public knew all about them too.

The officials were confident that the program worked out by the reassessing firm would insure fair valuations to all taxpayers. But, nobody bothered to explain the program to the taxpayers. So rumor-mongers had a field day. Protests, based on misinformation, deluged the council. In the end only a portion of the program was put into effect and much of its potential benefit was not realized. The city officials took it for granted that everybody was as well-informed as they about the new product. They failed as "salesmen."

Although it was not the case in the city just mentioned, some appraisal firms undertake to handle the public relations aspect of the program directly. That is an almost impossible task for any outsider, no matter how talented or how sincere. Local officials must administer the completed program and live with the people whom it affects; therefore, the job of interpreting it to the people is theirs.

Every local facility for getting the message to the people should be used. Any activity affecting taxes has news value and is therefore welcome. Newspapers and radio stations are usually glad to cooperate. Personal contacts and group contacts are very valuable. The assessor - as well as other city officials - should speak to every organized club and community group interested in the program, explaining the reassessment and answering

the questions of club members.

The citizen information program should be initiated at the beginning of a reassessment project.

A preliminary step to reassessment is usually some type of study to determine the need for uniform valuation procedures. This might involve no more than a comparison of recent sales on a representative group of properties with present assessments on the same properties. If there is too wide a spread in those ratios (and a spread of 5 to 1 is very common) it is a strong indication that remedial action should be taken. Reporting the findings of such a study is a good way to begin informing the public. Hammer away at the need for reassessment. Be sure the majority of the people understand the need.

The information program should continue during the time that the revaluation work is going on. First of all be sure that everyone working on the revaluation understands the methods and understands the purpose - equalization of taxes, not raising taxes. Explain the methods and purpose to the public. Periodic news releases indicating the progress of the program are good but they should not be merely statistical.

Publicity must continue after the program is completed and in operation. Let people know what changes have occurred. Be specific, describe specific cases, even though you will not want to mention names.

Whatever method local officials may use to bring about an equalization of taxes - and practically all of them are variations of the two mentioned in this article - the result can be an improvement of the status of the tax assessor as well as an improvement in the status of city finances.

However, good results can be obtained only if, from the beginning, the public is sold on the need for reassessment, the processes by which the reassessment is made, and what the reassessment means to the average citizen.

If the tax assessor obtains a good product - an adequate tax assessment plan, if he is thoroughly familiar with the plan, and, if he can sell the people on the system, he may wake up one morning and find himself in the glorious category of God, Mother, Country, and the Party. Its possible for everybody to <u>love</u> the tax assessor!

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